

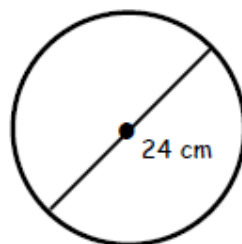
## Circles

### Exercise 1

- Draw round a 2p or 10p coin to create a circle.
  - Draw in a RADIUS and mark it R.
  - Draw in a DIAMETER and mark it D.
  - In your figure write the word CIRCUMFERENCE around the circumference.

- This is a sketch of a circle whose diameter is 24 cm.

What must the length of its radius be ?



- The radius of another circle is 30 centimetres.

What must the length of its diameter be ?

- Shown is a sketch of 4 touching circles surrounded by a rectangular box.

The radius of each circle is 8 cm.

Calculate what the length and breadth of the box must be.

(Do not use a ruler).

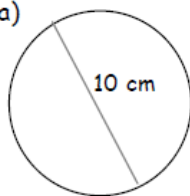


### Exercise 2

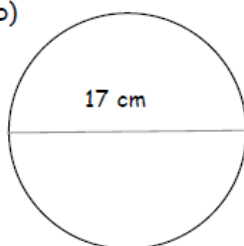
- Copy and complete :- "The formula for the circumference is  $C = \dots\dots\dots$ "

- Calculate the circumference of these circles :-

(a)



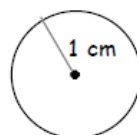
(b)



(c)



(d)

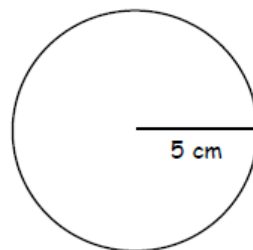


### Exercise 3

1. Find the area of a circle with radius 5 cm.

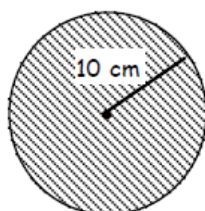
**COPY** and complete :-

$A = \pi r^2$ $\Rightarrow A = 3.14 \times 5 \times 5$ $\Rightarrow A = \dots\dots \text{cm}^2$
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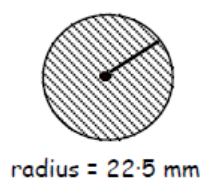


2. Calculate the area of each circle below :-  
(You **should** set down 3 lines of working)

(a)



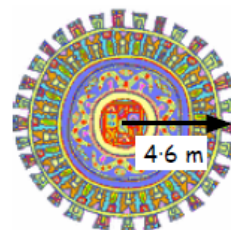
(b)



3. Calculate the area of the circular carpet shown.

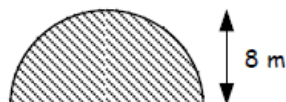
It has a radius of 4.6 metres.

(Round your answer to 1 dec. pl.)

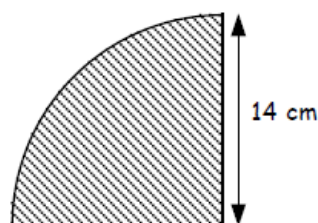


4. Calculate the area of these shapes :-

(a)

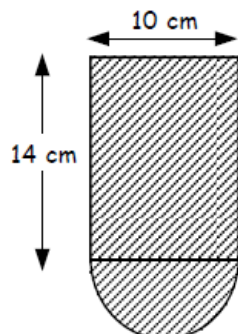


(b)



5. Calculate the area of these shapes :-

(a)



(b)

